

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Windsor Harbor Bridge
MHTD: J-158

JEFF07

DATE(S) OF CONSTRUCTION

1875

LOCATION

county road over Rock Creek; S17, T42N, R6E
Kimmswick; Jefferson County, Missouri

USE (ORIGINAL / CURRENT)

highway bridge / pedestrian bridge

RATING NRHP individually listed (score: 77)

CONDITION

good

OWNER

Kimmswick Historical Society

span number: 1
span length: 124.0'
total length: 194.0'
roadway wdt.: 16.3'

superstructure: wrought and cast iron, 9-panel, pin-connected Pratt through truss, with steel stringer approach span at each end
substructure: concrete abutments with steel pile bent piers (old steel cylinder piers below bridge)
floor/decking: asphalt-covered timber deck over steel stringers
other features: end post: cast iron Keystone columns; upper chord: 2 channels with cover and batten plates; lower chord: 2 punched rectangular eyebars (2 square eyebars with turnbuckles at outer panels); vertical: cast iron Keystone columns (2 square eyebars at hip); diagonal: 2 punched rectangular eyebars; counter: 1 round eyerod with turnbuckle; lateral bracing: square bar with slotted turnbuckle; strut: 4 angles with lacing; floor beam: 2 I-beams (not original); guardrail: 2 angles; cast iron hip blocks and bearing shoes; cast iron portal kneebraces

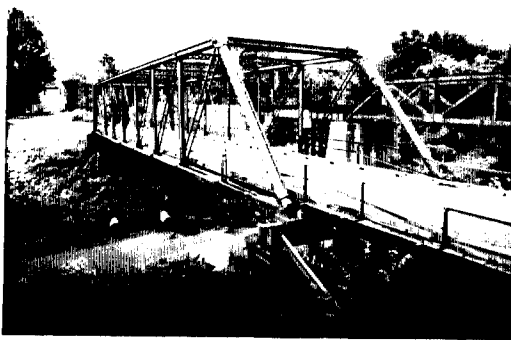
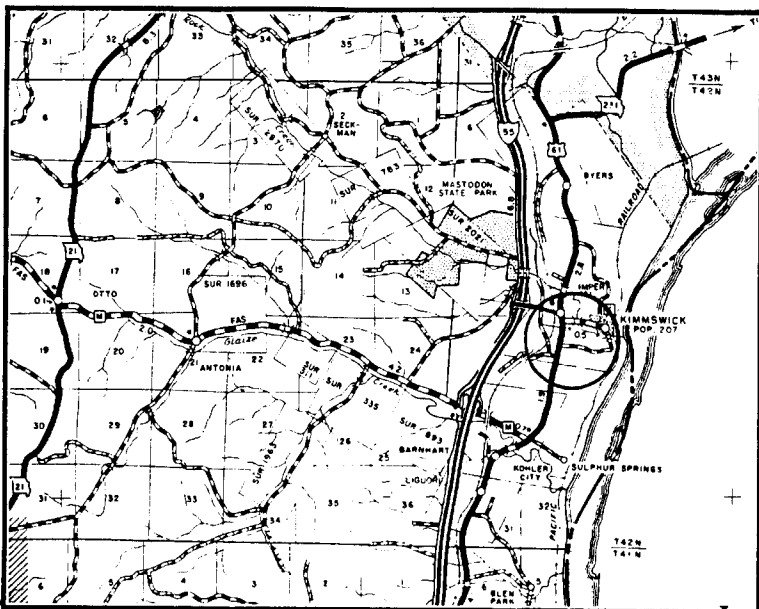
The Windsor Harbor Bridge, which currently spans Rock Creek in Kimmswick, was originally built in 1875 to "carry farm-to-market traffic across the river Des Peres from Alabama Avenue in St. Louis to Lemay Ferry Road" in what is now the town of Mehlville. The truss's history, therefore, dates to 1875, when city and county officials let a construction contract to the Keystone Bridge Company of Pittsburgh to erect a structure at this location, for the aggregate sum of \$13,000.00. The 124-foot pin-connected Pratt through truss was completed the same year and carried wagon traffic with no alterations until 1903 when the Jefferson County Road and Bridge Commissioner, P.M. Reilly, contracted with W.J. Knopp for \$290.00 to replace the structure's flooring.

After nearly fifty-three years of service, the court ordered the county engineer in 1928 to delineate a steel bridge to supplant the Lemay Ferry Bridge. The new concrete and steel viaduct was completed in 1930, whereupon the 1875 truss was moved to its present location spanning Rock Creek in Kimmswick, a small community some twenty miles south of St. Louis. The relocation was arranged through the bridge's donation by the city of St. Louis to Jefferson County, if the county would assume moving and re-erection costs. Local contractor H.C. Grunewald, paid \$1420.00 by the county for moving the truss, successfully relocated the wrought iron span to its new site across Rock Creek in Kimmswick. Once reliant on river trade, Kimmswick's population began to dwindle over the years as superhighways became the norm, although the resulting light traffic loads helped to preserve the overall structural integrity of the bridge. The late 1970s ushered in new transformations for the town, however, and through an improved water supply and several local restoration projects, the town began to prosper once again. So successful were the residential restoration ventures, the local Kimmswick Historical Society sought

to obtain ownership of the Windsor Harbor Bridge from the Missouri Highway and Transportation Commission when its replacement became evident in the late 1980s. The **Globe-Democrat** reported the eventual outcome in the summer of 1987, "An agreement was reached...making it possible for Kimmswick's Historical Society to accept ownership, control and maintenance of the old bridge. Under terms of the agreement, the future use of the historic bridge will be restricted to bicycle and pedestrian traffic." Under the historical society's stewardship and listed on the National Register of Historic Places since 1983, the Windsor Harbor Bridge functions in place today carrying only recreational traffic. The pre-1880s historical truss, an excellent example of adaptive re-use, has maintained a high degree of both structural and historical integrity. The oldest bridge in Jefferson County and the oldest Pratt through truss in the state of Missouri, The Windsor Harbor Bridge is an remarkably important example of wrought iron bridge construction.

NAME(S) OF STRUCTURE

Windsor Harbor Bridge

PHOTOS AND SKETCH MAP OF LOCATION**LOCATION MAP**TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number J-158; Jefferson County Court Record, Book 9: page 54 (8 December 1903), page 92 (5 February 1904), page 115 (5 April 1904); Jefferson County Court Record, Book 14: page 158 (6 May 1929), page 222 (8 April 1930) - located at the Jefferson County Courthouse, Hillsboro MO; Memorandum of Agreement, dated 8 June 1987; *Globe-Democrat* "Well-traveled Bridge is Saved Again," by Carol Rehg, n.p.; letter to County Commission of Jefferson County from the Kimmswick Historical Society, dated 1 June 1987; *The News Democrat*, "Kimmswick's Old Bridge Will Still Have a Place in the Sun," by Sam Shapiro, 9 June 1987, n.p.; Nomination to the National Register of Historic Places for the Windsor Harbor Road, prepared by the Landmarks Association of St. Louis, Inc., Elizabeth Eldridge, Richard Bliss, and Carolyn Toft, Editors, 22 June 1983, St. Louis MO; field inspection by Clayton Fraser, 5 September 1991.

INVENTORIED BY

Clayton B. Fraser

AFFILIATION

Fraserdesign, Loveland CO

DATE15 January 1993

Windsor Harbor Bridge

JEFF07

GENERAL DATA

structure no.:	J-158	city/town:	Kimmswick
county:	Jefferson	feature inters.:	Rock Creek
		cadastral grid:	S17, T42N, R6E
		highway route:	county road
		highway distr.:	6
		current owner:	Kimmswick Historical Society

STRUCTURAL DATA

superstructure: wrought and cast iron, 9-panel, pin-connected Pratt through truss, with steel stringer approach span at each end

substructure: concrete abutments with steel pile bent piers (old steel cylinder piers below bridge)

span number:	1	condition:	good
span length:	124.0'	alterations:	trusses moved, 1930; restricted to pedestrian and bicycle traffic, 1970
total length:	194.0'	floor/decking :	asphalt-covered timber deck over steel stringers
roadway width:	16.3'	other features:	end post: cast iron Keystone columns; upper chord: 2 channels with cover and batten plates; lower chord: 2 punched rectangular eyebars (2 square eyebars with turnbuckles at outer panels); vertical: cast iron Keystone columns (2 square eyebars at hip); diagonal: 2 punched rectangular eyebars; counter: 1 round eyerod with turnbuckle; lateral bracing: square bar with slotted turnbuckle; strut: 4 angles with lacing; floor beam: 2 I-beams (not original); guardrail: 2 angles; cast iron hip blocks and bearing shoes; cast iron portal kneebraces

HISTORICAL DATA

erection date: 1875

erection cost: approximately \$13,000.00

designer: Keystone Bridge Company, Pittsburgh PA

fabricator : Keystone Bridge Company, Pittsburgh PA

contractor : Keystone Bridge Company, Pittsburgh PA

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number J-158; Jefferson County Court Record, Book 9: page 54 (8 December 1903), page 92 (5 February 1904), page 115 (5 April 1904); Jefferson County Court Record, Book 14: page 158 (6 May 1929), page 222 (8 April 1930) - located at the Jefferson County Courthouse, Hillsboro MO; Memorandum of Agreement, dated 8 June 1987; *Globe-Democrat* "Well-traveled Bridge is Saved Again," by

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Carol Rehg, n.p.; letter to County Commission of Jefferson County from the Kimmswick Historical Society, dated 1 June 1987; **The News Democrat**, "Kimmswick's Old Bridge Will Still Have a Place in the Sun," by Sam Shapiro, 9 June 1987, n.p.; Nomination to the National Register of Historic Places for the Windsor Harbor Road, prepared by the Landmarks Association of St. Louis, Inc., Elizabeth Eldridge, Richard Bliss, and Carolyn Toft, Editors, 22 June 1983, St. Louis MO; field inspection by Clayton Fraser, 5 September 1991.

sign. rating: 77

evaluation: NRHP individually listed (only remaining example in Missouri of earliest cast iron bridge construction)

inventoried by: Clayton Fraser and Michelle Crow-Dolby 15 January 1993